State Route 43/State Route 119 Intersection Improvements

In Kern County at the intersection of State Route 43, Enos Lane and State Route 119

06-KER-43/119-0.1/0.4, 17.8/18.5

06-0612000293/06-0P900

Initial Study
with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

April 2015

Caltrans

General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Kern County, California. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at 1352 W. Olive Avenue, Fresno, CA 93728, weekdays from 8:00 a.m. to 4:00 p.m, Taft Branch Library, 27 Cougar Court, Taft, CA 93268, Tuesdays through Thursdays 11:00 a.m. to 7:00 p.m. and at the Shafter Library, 236 James Street, Suite No. 2, Shafter, CA 93263, Mondays through Thursdays 11:00 a.m. to 7:00 p.m. The document can also be accessed electronically at the following website: http://www.dot.ca.gov/dist6/environmental/envdocs/d6/.
- We welcome your comments. If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

  G. William "Trais" Norris III
  San Joaquin Environmental Management Branch
  California Department of Transportation
  855 M Street, Suite 200
  Fresno, CA 93721-2716

- Submit comments via email to: trais.norris@dot.ca.gov.
- Submit comments by the deadline: May 8, 2015

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and build all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: G. William "Trais" Norris III, Environmental Management Branch, 855 "M" Street, Suite 200, Fresno, CA; (559) 445-6447, District 6 Public Affairs Office at (559) 488-4067, or use California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.

Project Description and Background:

Note: *Pursuant to (State) Division 13, California Public Resources Code*—This project documentation has been prepared in compliance with the California Environmental Quality Act (CEQA). A Categorical Exclusion has been signed for National Environmental Policy Act (NEPA) compliance.

Project Title:	**State Route 43/State Route 119 Intersection Improvements**
Lead Agency Name and Address:	**Caltrans, 1352 W. Olive Avenue. Fresno, CA 93726**
Contact Person and Telephone Number:	**G. William "Trais" Norris III, (559) 445-6447**
Project Sponsor's Name and Address:	**Caltrans, 1352 W. Olive Avenue. Fresno, CA 93726**
Approved By:	**Signature:** **Date:** 4/2/2015 **Title: Senior Environmental Planner**
Project Location:	The project is located at the intersection of State Routes 119 and 43, and a county road named Enos Lane in south-central Kern County, near Taft and Shafter. The project area is from post mile 0.1 to 0.4 on State Route 43, post mile 17.8 to 18.4 on State Route 119, and from the intersection to 0.2 miles south on Enos Lane.
General Plan Description:	State Route 119 is an intra-regional route for agricultural and oil-industry related traffic, as well as commuter traffic between the cities of Taft and Bakersfield. State Route 43 also carries Taft-Bakersfield commuter traffic, but experiences a larger component of large agricultural implements during growing and harvest seasons. Enos Lane leads to the public access of the Buena Vista Aquatic Recreational Area, just two miles south of the project, and thus experiences a significant contingent of recreational vehicles and boat trailers.
Zoning:	Zoning designation for land within the project area: northwest quadrant-exclusive agriculture (A); northeast quadrant-highway commercial (CH), precise development combining (PD); southwest and southeast quadrant-light industrial (M-1), precise development combining (PD)
Description of Project:	The project proposes to construct a mixed single and dual lane roundabout at the intersection of State Route 119 and State Route 43, and Enos Lane. The

	roundabout would have a single-lane to dual-lane transitioning approach and dual circulatory lanes in the westbound and eastbound State Route 119 direction with a single westbound departure continuing as a single-lane east of the intersection and dual eastbound departure transitioning to a single-lane west of the intersection. The roundabout would also have a single-lane to dual-lane transitioning approach for southbound State Route 43 with a single southbound circulatory and single northbound departure lane north of the intersection, and a single-lane approach and circulatory lane in the northbound Enos Lane direction and a single southbound departure lane south of the intersection. The roadways would have concrete splitter islands separating direction of travel within the roundabout approaches and departures. The center of the roundabout within the circulatory paths would have reinforced concrete contrast surface treatment for the truck apron and center island with minor raised slopes to accommodate oversized, overweight and variance load large truck vehicles. Electrical work for lighting is required. Utility poles within the project area would be relocated.
Surrounding Land Uses and Setting:	State Route 119 and State Route 43 are both conventional, two-lane undivided highways. State Route 119 is situated in an east-west alignment with a 12-foot wide lane and 8-foot wide shoulder in each travel direction. State Route 43 begins at the intersection with State Route 119 and proceeds north with a 12-foot wide lane and a one to two-foot wide shoulder in each travel direction (north and south). On the south side of the State Route 119/State Route 43 intersection, Enos Lane proceeds south. Enos Lane also has 12-foot lanes and one to two-foot wide shoulders in each travel direction. At the intersection, left turn lanes are present in all four travel directions, but the left-turn channelization lanes are all of less than standard length. The existing intersection is controlled by a fully phased, four-way signal light system. One gas station/convenience store is located in the southwest quadrant of the intersection. The other quadrants are vacant land, but Kern Water Bank Authority conservation properties are located at the

	northwest quadrant and adjacent to the western edge of the northeast quadrant. The highway junctions with Interstate 5 are located 1.5 miles east of the project area on State Route 119 and 1.75 miles north of the project area on State Route 43.
Other Public Agencies Whose Approval is Required:	United States Fish and Wildlife Service, California Department of Fish and Wildlife,

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project. Please see the CEQA checklist for additional information. Any boxes *not* checked represent issues that were considered as part of the scoping and environmental analysis for the project, but for which no adverse impacts were identified; therefore, no further discussion of those issues is in this document.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☒	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☒	Hazards and Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☐	Noise
☐	Paleontology	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation/Traffic	☐	Utilities/Service Systems
☐	Mandatory Findings of Significance				

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to construct a mixed single and dual-lane roundabout at the intersection of State Route 119 and State Route 43, and Enos Lane.

Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This Mitigated Negative Declaration is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons.

The proposed project would have no effect on: agriculture and forest resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation, and wetlands.

In addition, the proposed project would have no significant effect on: aesthetics, air quality, cultural resources, emergency and public services, hazardous waste and materials, natural communities, transportation/traffic, utilities and service systems

In addition, the proposed project would have no significantly adverse effect on threatened, endangered and protected species (Giant kangaroo rat, Tipton kangaroo rat, San Joaquin kit fox, California jewel-flower, Kern mallow and blunt-nosed leopard lizard, Swainson's hawk)) because the following avoidance, minimization and mitigation measures would reduce potential effects to insignificance:

- Giant kangaroo and Tipton kangaroo rat: Conduct pre-construction field surveys and install Environmentally Sensitive Area fencing to suitable habitat.
- San Joaquin kit fox: Conduct pre-construction field surveys and apply exclusion zones around San Joaquin kit fox dens.
- California jewel-flower and Kern mallow: Conduct pre-construction field surveys.
- Blunt-nosed leopard lizard: Conduct pre-construction field surveys and require low speed limits within the construction site.
- Swainson's hawk: Conduct pre-construction field surveys.
- San Joaquin antelope squirrel: Conduct pre-construction field surveys and install Environmentally Sensitive Area fencing to suitable habitat.

_____ _____

G. William "Trais" Norris III
Senior Environmental Planner
District 6
California Department of Transportation

Date

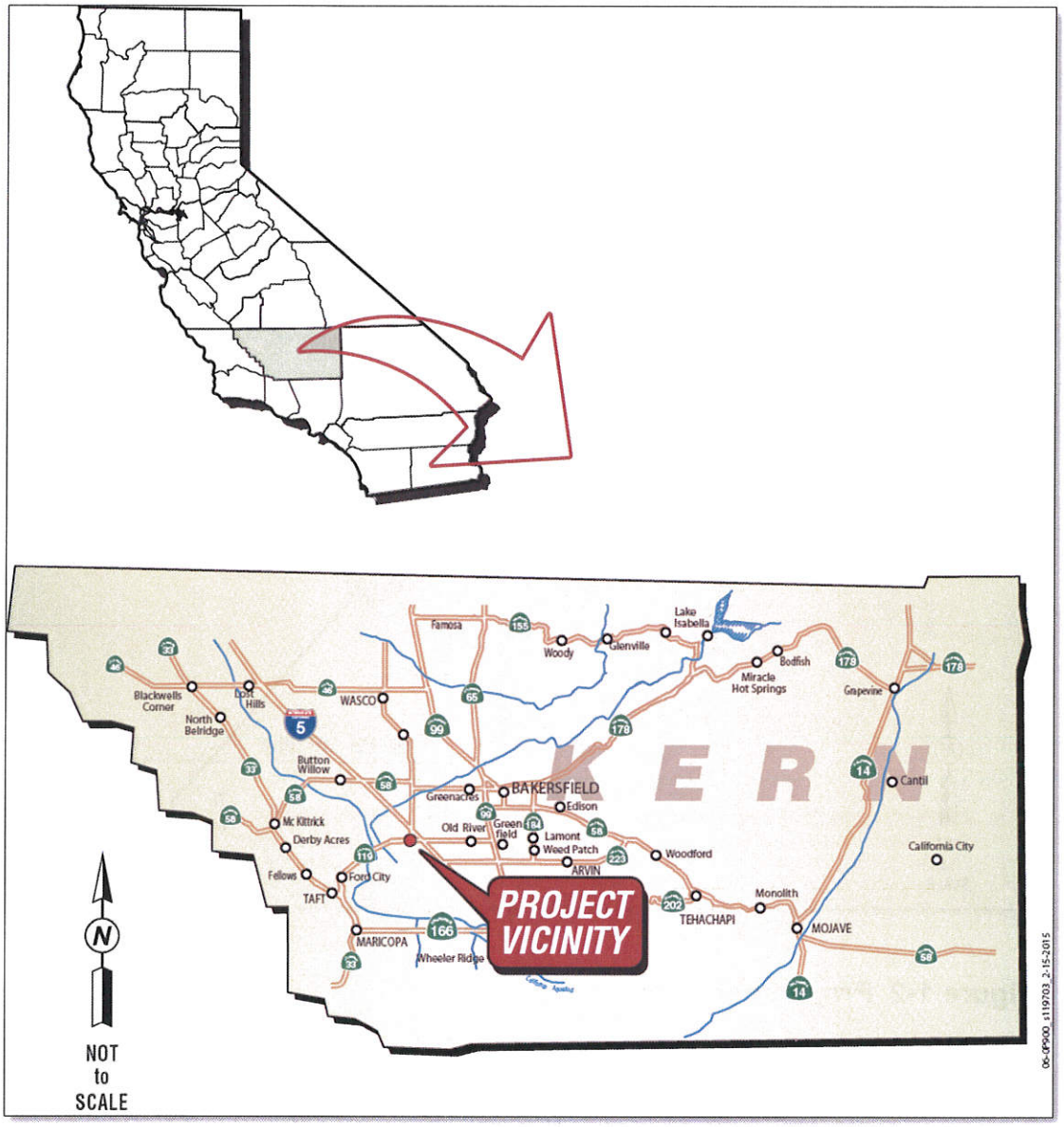


Figure 1-1 Project Vicinity Map

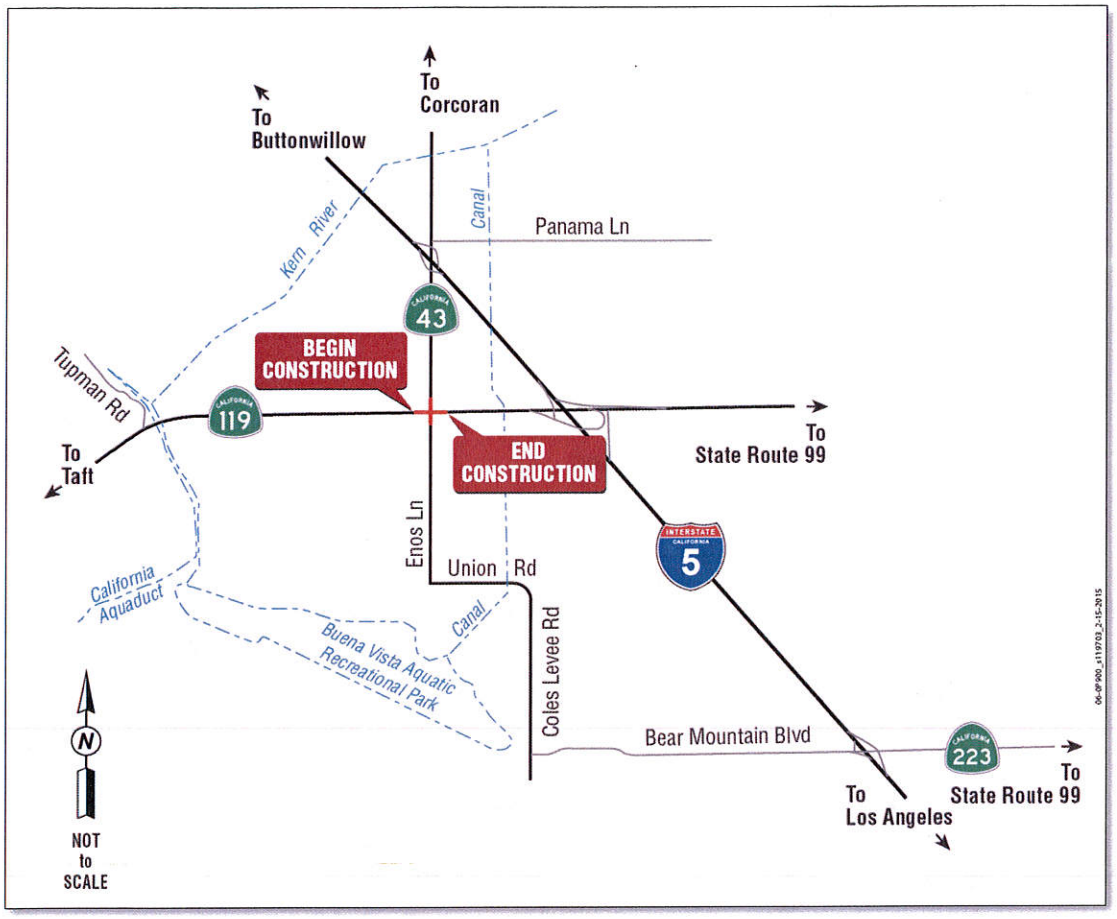


Figure 1-2 Project Location Map

CEQA Environmental Checklist

06-KER-43/119	0.1-0.4/17.8-18.5	06-0612000293
Dist.-Co.-Rte.	P.M/P.M.	Project ID#

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicated no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA—not NEPA—impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project, Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	☐	☐	☐	☒
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

IV. BIOLOGICAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

VII. GREENHOUSE GAS EMISSIONS: Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

If applicable, an assessment of greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. Necessary information is located in Technical Studies Bound Separately.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Additional Explanations for Questions in the Impacts Checklist

IV. Biological Resources (checklist questions a and b)

Threatened and Endangered Species

Affected Environment

A Natural Environmental Study was completed for this project in March 2015.

Animals

Animals that have the potential to occur within the project area are the blunt-nosed leopard lizard (*Gambelia sila*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), the giant kangaroo rat (*Dipodomys ingens*), San Joaquin kit fox *(Vulpes macrotis mutica)*, Swainson's hawk (*Buteo swainsoni*), and San Joaquin antelope squirrel (*Ammospermophilus nelsoni*).

Blunt-Nosed Leopard Lizard

The blunt-nosed leopard lizard (*Gambelia sila*) is federally listed as endangered and state listed as endangered and fully protected. It is a relatively large lizard, ranging from 3.4 to 4.7 inches in length. Its color varies from yellowish or light grey-brown to dark brown, depending on the surrounding soils and vegetation. The color pattern on its back consists of longitudinal rows of dark spots interrupted by a series of 7 to 10 white, cream-colored, or yellow transverse bands.

Typically, the blunt-nosed leopard lizard can be found at elevations of 100 to 2,400 feet above sea level, on alkali flats, desert washes, arroyos, canyons and low foothills. Suitable habitat for the blunt-nosed leopard lizard contains sparely vegetated shrubs and grassland habitats in areas of lower elevation. In areas of higher elevation, blunt-nosed leopard lizards are confined to broad sandy washes. These lizards will find shade in mammal burrows, shrubs or structures such as fence posts. Blunt-nosed leopard lizards are diurnal, hibernating in the winter months and active from March to June or July. Blunt-nosed leopard lizards feed on grasshoppers, cicadas, and small lizards.

Caltrans biologists conducted juvenile blunt-nosed leopard lizard field surveys during the late summer of 2013. Caltrans contracted Quad Knopf, Inc. to conduct full-protocol adult blunt-nosed leopard lizard field surveys on the project site in early summer of 2014. The protocol surveys did not locate any blunt-nosed leopard lizards within or near the project area. Given the lack of recent sightings, the poor habitat quality, and lack of results from protocol-level surveys, the potential that blunt-nosed leopards lizard are present on the site is low.

Giant Kangaroo and Tipton Kangaroo Rat

The giant kangaroo rat (*Dipodomys ingens*) is federally and state listed as endangered. Adult giant kangaroo rats are 12.2 to 13.7 inches long and weigh about 4.6 to 6.4 ounces. They have short necks, large flattened heads and long tails. The

giant kangaroo rat has large, fur-lined cheek pouches open on each side of its mouth extending as deep pockets of skin along the sides if its head. Giant kangaroo rats are found in locations where fine sandy loam soils and sparse annual grasses and flowering plants occur. They require level land for burrowing. The giant kangaroo rat primarily feeds on seeds from pepper grass and filaree. Giant kangaroo rats are nocturnally active all year long.

Potential signs of giant kangaroo rat activity were observed at six locations during the blunt-nosed leopard field surveys in early summer of 2014, all of them east of State Route 43 and Enos Lane. Three of these observations are adjacent to the proposed construction footprint. However, no giant kangaroo rats were observed during the small mammal field surveys.

The Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*) is listed as federal and state endangered. Adult Tipton kangaroo rats are 8.7 to 9.25 inches long and weigh about 1.3 ounces. They are distinguished from other kangaroo rats within their range by the presence of four toes on their hind feet (the other species have five toes). Tipton kangaroo rats inhabit open, arid vegetated grassy areas having saltbrush and goldenbrush scrub. They dig burrows in soft, finely textured soils, on small mounds, or embankments that are higher than the surrounding terrain. Tipton kangaroo rats eat mostly seeds, but will supplement their diet with green, herbaceous vegetation and insects.

Potential signs of Tipton kangaroo rat activity were observed at six locations during the blunt-nosed leopard field surveys in early summer of 2014, all of them east of State Route 43 and Enos Lane. One of these observations are adjacent to the proposed construction footprint. However, no Tipton kangaroo rats were observed during the small mammal field surveys.

San Joaquin Kit Fox

The San Joaquin kit fox *(Vulpes macrotis mutica)* is federally listed as endangered and state listed as threatened. San Joaquin kit foxes average 31 inches long and about 12 inches tall at their shoulders. They have a small slim body, relatively long ears set close together, narrow nose and a long bushy tail with a narrow black tip. Coat color varies from buff, tan, grizzled or yellow-grey. San Joaquin kit foxes are mostly nocturnal and inhabit annual grassland or grassy vegetation with scattered shrubs and brush. They dig their dens in loose-textured soils on open and level land. San Joaquin kit foxes feed on desert cottontails, rodents, insects, reptiles, birds, bird eggs and vegetation.

Evening field surveys were conducted in 2013 and 2014 within the project area. A den that appeared to be recent was monitored with a motion-activated camera station for one evening during the 2014 spotlighting surveys. The camera station did not record any San Joaquin kit foxes. San Joaquin kit foxes have not been observed on or near the project site during any of the other biological field survey efforts as well.

Swainson's hawk

The Swainson's hawk (*Buteo swainsoni*) is state listed as threatened and is protected by the Migratory Bird Treaty Act. The Swainson's hawk is a slender bird with long pointed wings and dark flight feathers. It occurs in a range of color morphs, with a clean whitish underside and neat dark breast. These hawks forage in grasslands, suitable grain or alfalfa fields, or livestock pastures. They eat mice, gophers, ground squirrels, rabbits, large arthropods, amphibians, reptiles, birds and sometimes fish. These hawks roost in trees, but will roost on the ground if no trees are available. The Swainson's hawk breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannahs in the Central Valley. Breeding occurs from late March to late August, with peak activity occurring in late May or July.

San Joaquin antelope squirrel

The San Joaquin antelope squirrel (*Ammospermophilus nelsoni*) is state listed as threatened. This squirrel has tiny rounded ears and a streamlined, spindle-shaped body with short legs. Its short tail has laterally projecting thick fringes of hairs and is usually held cocked or curled over the squirrel's back. The San Joaquin antelope squirrel is a buffy-tan color with a light stripe along its sides and light-grayish to white undersides.

The San Joaquin antelope squirrel is a permanent resident of the western San Joaquin Valley from 200 to 1200 feet above sea level on dry, sparsely vegetated, loam soils. Suitable habitat contains scattered shrubs, annual forbs and grasses, and is distributed over broken terrain with small gullies and washes. These squirrels feed on a variety of things throughout the year, including insects, seeds, annual grasses and forbs and small vertebrates. They dig their own burrows and alter existing kangaroo rat burrows. They also use cover provided by rocks and other topographic features. They typically exhibit diurnal activity, but will avoid the midday hot temperatures. Breeding occurring from February into May, with a peak in April, producing one litter of 10 on average.

Plants

Plants that have the potential to occur within the project area are the California jewel-flower (*Caulanthus californicus*), Kern mallow (*Eremalche kernensis*), and the San Joaquin woolly threads (*Monolopia congdonii*).

California Jewel-Flower

The California jewel-flower *(Caulanthus californicus)* is federally and state listed as endangered. The California jewel-flower is also included in the California Native Plant Society inventory of rare and endangered plants as a CNPS 1B.1 plant: rare, threatened or endangered throughout its range; seriously threatened. It occurs in non-alkaline, undisturbed grasslands in subshrub scrub, valley grassland and pinyon-juniper woodland. The stems are often branched. Flowers appear pouch-like at their

base, and are attached at the top of the plant. The leaves are attached to the base of the plant. California jewel-flower typically blooms from February to May.

Kern Mallow

The Kern mallow *(Eremalche kernensis)* is federally listed as endangered and state-listed as a California Native Plant Society inventory of rare and endangered plants as a CNPS 1B.1 plant: rare, threatened, or endangered throughout their range; seriously threatened. The Kern mallow typically occurs in Valley saltbrush scrub with alkaline sandy loam or clay soils in areas where the brush cover is minimal. The form of the Kern mallow varies widely depending on seasonal precipitation: it can be single-stemmed or multiple stemmed, erect, or lateral stems trailing on the ground. The stems can be from one to twenty inches in length with white to pinkish flowers. Kern mallow blooms from March through May.

San Joaquin Woolly Threads

The San Joaquin woolly threads (*Monolopia congdonii*) is federally listed as endangered. It is also included in the California Native Plant Society inventory of rare and endangered plants as a CNPS 1B.2 plant: rare, threatened or endangered throughout its range; fairly threatened. This plant typically occurs in sandy grasslands and alkali sink habitats. This plant is two to twelve inches tall and loosely woolly. The San Joaquin woolly threads has wavy, narrow, oblong leaves and yellow flower heads clustered at the branch tips. This plant blooms from February to May.

Environmental Consequences

Animals

Blunt-Nosed Leopard Lizard

The proposed project would impact 3.76 acres of low-quality habitat that may be potentially suitable for the blunt-nosed leopard lizard. Of these, 0.41 acres are permanent impacts and 3.35 acres are temporary in that they will be re-contoured and re-vegetated after construction. However, no take of this species is anticipated with the implementation of the avoidance and minimizations measures.

Giant Kangaroo and Tipton Kangaroo Rat

The proposed project would impact approximately 3.76 acres of potentially suitable habitat for the giant kangaroo rat. This habitat is considered low-quality, due to its proximity to a busy travel way and level of disturbance. Of these, approximately 0.41 acres of impacts would be considered permanent and 3.35 acres would be temporary in that those areas would be re-contoured and seeded after construction, and thus available to be used as habitat in the future.

The proposed project would impact approximately 3.76 acres of potentially suitable habitat for the Tipton kangaroo rat. This habitat is considered low-quality, due to its proximity to a busy travel way, level of disturbance, and documented presence of Heerman's kangaroo rats. Of these, approximately 0.41 acres of impacts would be considered permanent and 3.35 acres would be temporary in that those areas would be re-contoured and seeded after construction, and thus available to be used as habitat in the future.

San Joaquin Kit Fox

The proposed project would impact approximately 3.76 acres of potentially suitable habitat for the San Joaquin kit fox. This habitat is considered low-quality, due to its proximity to a busy travel way and level of disturbance. Of these, approximately 0.41 acres of impacts would be considered permanent and 3.35 acres would be temporary in that those areas would be re-contoured and seeded after construction, and thus available to be used as habitat in the future.

Swainson's Hawk

The project is anticipated to impact up to 3.76 acres of low-quality Swainson's hawk foraging habitat. Approximately 0.41 acres are permanent impacts and 3.35 acres are temporary in that the area would be re-contoured and seeded after construction. The habitat is considered low-quality due to its proximity to a busy travel way. No Swainson's hawk nesting habitat will be impacted by the proposed project.

Construction activity may cause disturbance impacts to Swainson's hawk hunting areas along the State Route 119 and 43 corridors. Disturbance may result from equipment noise, motion, vibrations, dust, and human presence. However, construction activities that would disturb small prey species, such as lizards and mice, may actually enhance hunting opportunities for Swainson's hawks as the prey species flee the area and become exposed. The disruption and scattering of prey species is a reason Swainson's hawks forage in recently harvested or disked agricultural fields, sometimes while work within the field is ongoing (Swainson's hawks survey observations from other Caltrans projects).

San Joaquin Antelope Squirrel

The proposed project would impact approximately 3.76 acres of potentially suitable habitat for the San Joaquin antelope squirrel. This habitat is considered low-quality, however, due to its proximity to a busy travel way and level of disturbance. Of these, approximately 0.41 acres of impacts would be considered permanent and 3.35 acres would be temporary in that those areas would be re-contoured and seeded after construction, and thus available to be used as habitat in the future.

The permanent habitat impacts are considered to be minimal due to their small extent (less than 0.5 acres) relative to the habitat available in the area, and their adjacency to an existing, heavily travelled highway. With the implementation of avoidance and

minimization efforts, no direct impacts to the San Joaquin antelope squirrel are anticipated.

Plants

California Jewel-Flower

The project will result in 0.47 acres of temporary impacts to habitat. However, with implementation of the avoidance and minimizations measures, no impacts to California jewel-flower populations are anticipated.

Kern Mallow

No impacts to Kern mallow populations are anticipated.

San Joaquin Woolly Threads

An estimated 0.41 acres of permanent impacts and 3.35 acres of temporary impacts to low-quality, valley saltbrush scrub and ruderal habitat would occur as a result of project activities. With the implementation of avoidance and minimization measures, no impacts to San Joaquin woolly threads populations are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

Animals

Blunt-Nosed Leopard Lizard

- Protocol-level pre-construction surveys within the project area to determine any presence or sign of the blunt-nosed leopard lizard would be conducted the season prior to the start of construction. If blunt-nosed leopard lizards are found within the action area, the U.S. Fish and Wildlife Service will be contacted to discuss ways to proceed with the project and avoid take to the maximum extent possible.
- A qualified and approved biological monitor would be onsite during initial ground-disturbing activities.
- Requiring low speed limits within the construction site will lessen the probability that blunt-nosed leopard lizards could be ran over by vehicles and equipment.
- No mitigation measures for impacts to potential, very low quality blunt-nosed leopard lizard habitat are proposed because A) no occurrences of the species have been recorded in spite of protocol-level surveys; B) the habitat within the project site is low quality due to dense growth of invasive grass and weeds and periodic disking, so re-colonization of the site by the species is highly unlikely.

Giant Kangaroo and Tipton Kangaroo Rat

- Preconstruction surveys would be conducted to avoid potential impacts to this species. If occupied suitable habitat is observed during surveys, avoidance measures will be implemented within identified suitable habitat where feasible.
- A qualified biological monitor would be on site during initial ground-disturbing activities.
- To avoid inadvertent impacts to adjacent suitable habitat, the work area would be clearly delineated with Environmentally Sensitive Area fencing.
- With the implementation of avoidance and minimization measures, no impacts to individual giant kangaroo rats and Tipton kangaroo rats are anticipated. Giant kangaroo rats and Tipton kangaroo rats are not expected to occur on the project site, so no compensatory mitigation is proposed.

San Joaquin Kit Fox

- Preconstruction/pre-activity surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox.
- Surveys would be conducted within the proposed project boundary and a 200-foot area outside the project footprint to identify habitat features.
- If natal/pupping dens are discovered within the project area or within 200 feet of the project boundary, the Service would be immediately notified.
- The configuration of exclusion zones around San Joaquin kit fox dens should have a 50-foot radius around potential dens and a 100-foot radius around known dens measured outward from the entrance or cluster of entrances.
- Disturbance to all San Joaquin kit fox dens would be avoided to the maximum extent possible.
- A qualified biologist would be present at the construction site during initial ground-disturbing activities.
- To the extent possible, a biologist would be available on-call during all construction periods when not present onsite. Appropriate provisions found in the *U.S. Fish and Wildlife Service Standard Measures for Protection of the San Joaquin Kit Fox for Prior to or During Ground Disturbance, Construction and On-Going Operational Requirements* would also be implemented.

- With avoidance and minimization measures, no direct impacts to individual San Joaquin kit foxes are anticipated. The species is unlikely to occur on the project site, so no compensatory mitigation is proposed.

Swainson's Hawk

- Preconstruction surveys would be conducted to ensure no nesting Swainson's hawk would be affected if construction were to occur during the nesting season.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area would be done outside of the nesting season, or only after the tree(s) have been surveyed by a qualified biologist to ensure that no migratory birds are nesting. At this time, no trees suitable for raptor nesting are proposed for removal.
- With avoidance and minimization measures, no direct impacts to the Swainson's hawk are expected to occur.

San Joaquin Antelope Squirrel

- Preconstruction surveys would be conducted to avoid potential impacts to this species. If occupied suitable habitat is observed during surveys, avoidance measures will be implemented within identified suitable habitat where feasible.
- A qualified biological monitor would be on site during initial ground-disturbing activities.
- To avoid inadvertent impacts to adjacent suitable habitat, the work area would be clearly delineated with Environmentally Sensitive Area fencing.

Plants

California Jewel-Flower

- Pre-construction surveys would be completed during the appropriate blooming period the season prior to groundbreaking activities.
- If the California jewel-flower is observed onsite, Caltrans will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss conservation measures to be implemented.
- No compensatory mitigation is proposed because no impacts to California jewel-flower are anticipated. Habitat on the project site is not considered suitable for California jewel-flower.

Kern Mallow

- Pre-construction surveys would be completed during the appropriate blooming period the season prior to groundbreaking activities.
- If the Kern mallow is observed onsite, Caltrans will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss conservation measures to be implemented.

San Joaquin Woolly Threads

- Pre-construction surveys would be completed during the appropriate blooming period the season prior to groundbreaking activities.
- If the San Joaquin wooly threads are observed onsite, Caltrans will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss conservation measures to be implemented.
- Impacts to San Joaquin woolly-threads populations are not anticipated. Therefore, no compensatory mitigation is proposed.

VIII. HAZARDS AND HAZARDOUS MATERIALS (checklist question a)

Affected Environment

The project area topography is generally flat, consisting of vacant land and disturbed, fallow agricultural fields. The immediate area around the project site is very open and sparsely developed. A California Department of Fish and Wildlife conservation property, the Kern Water Bank, is located in the northwest quadrant. A gas-station/convenience store located on the southwest quadrant of the State Route 119/State 43/Enos Road intersection. An informal parking lot/turn out area consisting of bare, compacted dirt is located directly adjacent to the northeast quadrant of the intersection.

A California Environmental Protection Agency regulatory search of Geotracker (underground storage tanks/leaking underground storage tanks), EnviroFacts (list of hazardous materials/hazardous waste sites), Solid Waste Information Systems (solid waste landfills) and EnviroStor (Cortese sites) databases was conducted and did not identify any actively worked on sites.

Environmental Consequences

One closed case site and one permitted underground storage tank location are within the project scope. Right of way and construction impacts are a concern for these two individual sites. Although a site has formal closure from regulatory agency, contamination can still exist. The sites are:

SO. Coles Levee # 10/Marathon Oil Company (closed case)
Cross Street State Route 119 and State Route 43
Bakersfield, CA 93311

Texaco Food Mart (registered underground storage tank)
Cross Street State Route 119 and State Route 43
Bakersfield, CA 93311

A previous aerial deposited lead study was conducted along State Route 119 from post mile 5.5 to post mile 13.3 and showed soluble lead levels above the regulatory threshold.

Residue from removal of yellow thermoplastic and yellow painted traffic stripe and pavement marking may contain lead chromate. Residue produced from the separate removal of yellow thermoplastic and yellow painted traffic stripe and pavement marking may contain heavy metals.

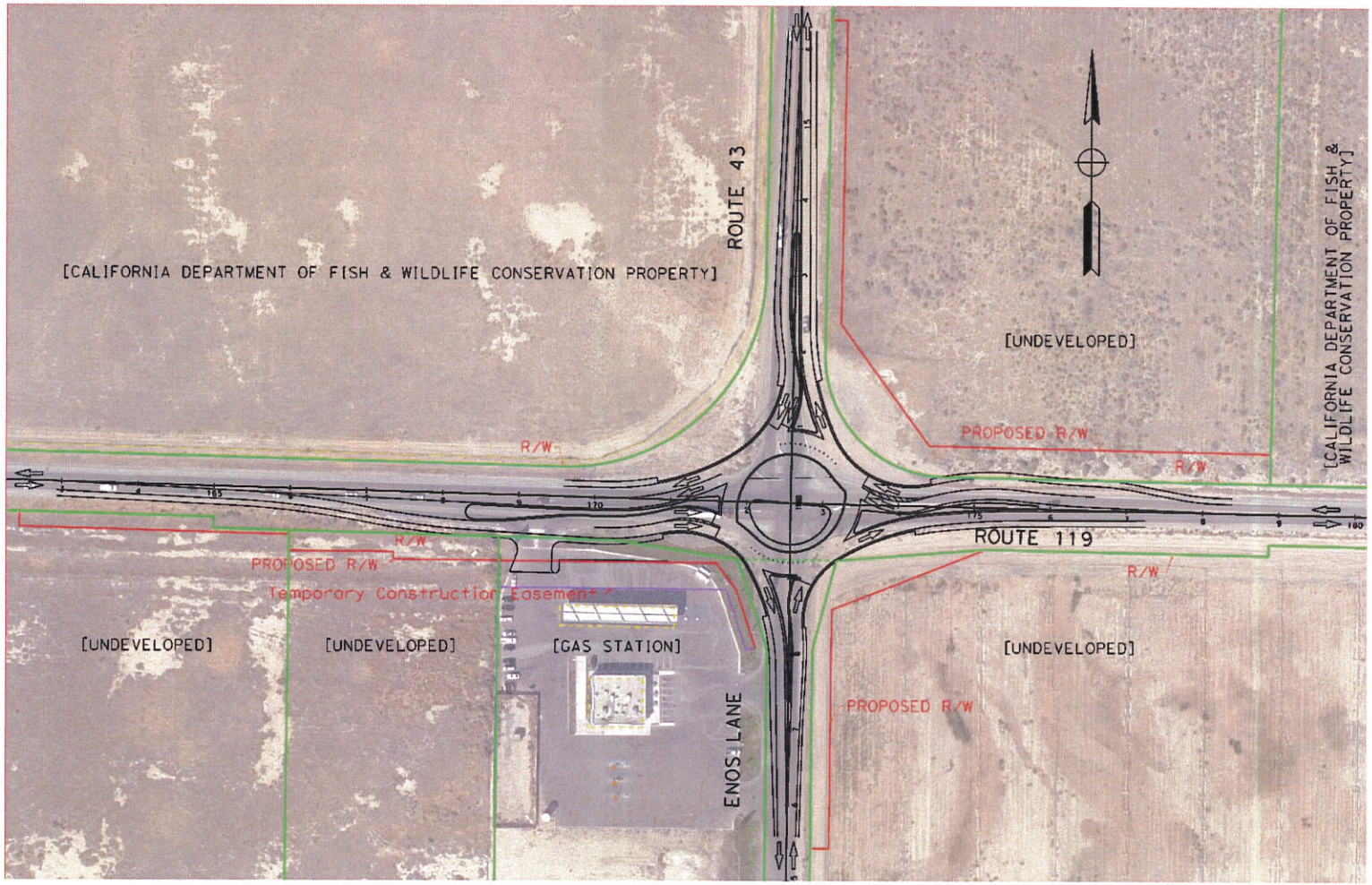
Avoidance, Minimization, and/or Mitigation Measures

A project specific study for heavy metals (CAM-17) prior to construction is recommended. California Administrative Manual (CAM) is also known as the California Code of Regulations (CCR). CCR Title 22 section 66261.24 specifies the 17 metals that can qualify waste as hazardous.

The former SO Coles Levee #10 location may contain residual petroleum-impacted soil that construction activities or right of way acquisition may affect. Testing for petroleum-impacted soil prior to construction to verify that disposal at a permitted landfill is not required is recommended. Once testing results are available confirming that the soil does not require special disposal, soil will be available for reuse on the project or relinquished to the contractor.

A lead compliance plan shall be included for soil management on the project. Caltrans Special Provisions for dealing with painted traffic stripe and pavement markings will be included in the contract.

Appendix A Roundabout Mapping



Appendix B Title VI Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN JR., Governor

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March 2013

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Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

MALCOLM DOUGHERTY
Director

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